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MEETING NOTES

TO:

Distribution

DATE:

February 9, 1994

FROM:

Philip Nixon

MEMO #:

SP307:021194:04

PROJECT #:

Solar Pond IM/IRA

ATTENDANCE:

Andy Ledford, EG&G
Dave Ericson, EG&G
Kathy London, EG&G
Harlen Ainscough, CDH

Rich Stegen, ES Dave Kennedy, ES

Steve Howard, DOE/SMS

Phil Nixon, ES

Tye DeMass, EG&G

DISTRIBUTION:

Attendees

Randy Ogg, EG&G Mark Austin, EG&G Betty Wallace, EG&G (2)

L. Benson, ES A. Conklin, ES H. Heidkamp, ES

K. Cutter, ES S. Stenseng, ES

S. Hughes, ES T. Evans, ES B. Cropper, ES

C. Montes, ES
W. Edmonson, ES

D. Myers, ES R. McConn, ES

SUBJECT:

Establishment of a CAMU

There are 7 criteria that must be addressed to justify the establishment of a Correction Action Management Unit (CAMU). It was agreed that the criterion #6 which addresses the use of treatment may be the most difficult one to justify. It was agreed that the best way to address the treatment issue is to specify that treatment is not required for the establishment of a CAMU, and that treatment of the OU4 lines and media is not appropriate to ensure the protection of human health and the environment. The following points will be considered in preparing the justification:

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COCUMENT CLASSIFICATION REVIEW WAIVER PER CLASSIFICATION OFFICE

- 1) The detailed analysis of alternatives indicated that treatment was not necessary.
- 2) Concentrations are less than the levels requiring treatment by the land disposal restriction regulations.
- 3) Modeling demonstrates that the consolidation of liners and soils is protective of human health and the environment.
- 4) Present and discuss liner concentrations.
- 5) Placement of liners above the subsurface drain.

It was agreed that the request to establish a CAMU would be included in the IM/IRA decision document (dd). The IM/IRA-dd will also include a cross-reference section that will identify the sections of the document that discuss how DOE will implement the CAMU with respect to the state requirements.

Andy Ledford asked if the CDH could require soil treatment in order to establish a CAMU. Harlen Ainscough indicated that this might be possible. This could occur if DOE proposed to consolidate contaminated soils beneath the subsurface drainage layer and could not adequately demonstrate that leachate produced under saturated conditions could not be consumed directly via a drinking water pathway (comparison of leachate concentrations to drinking water standards). The CDH position is that soils within the region of the vadose zone that may become seasonally saturated must have concentrations that are protective of human health and the environment under both saturated and unsaturated conditions. Contaminants below the mean seasonal high water table elevation will be addressed via a potential ground water corrective actions project.

Harlen Ainscough indicated that he believes the CDH would grant approval for an OU4 CAMU if any soil with COC concentrations exceeding levels for human health and environmental protection were consolidated above the subsurface drainage layer. This would isolate the contaminants from contact with ground water. Isolation is the method used to ensure that the liners will not come into contact with ground water.

Andy Ledford asked if the CDH would allow rubble/debris from Building 788 to be consolidated beneath the engineered cover. Harlen Ainscough indicated that his interpretation of the CAMU regulation would allow the rubble/debris to be consolidated under the engineered cover. The rubble/debris from Building 788 will be considered remediation wastes such that they are applicable for consolidation within the CAMU. However, DOE will have to demonstrate that the contaminants leaching from the debris would be protective of human health and the environment. Rubble/debris will be consolidated above the subsurface drain where the materials will be isolated from contact with ground water. ES will have to specify a waste acceptance criteria for the rubble/debris so that it can be effectively consolidated within the engineered cover.

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It was discussed that a temporary unit may have to be established for staging the rubble/debris if Building 788 is removed prior to the establishment of the OU4 CAMU. Harlen Ainscough indicated that the management of the rubble/debris could be handled as part of the closure plan in lieu of establishing a temporary unit. Tye DeMass indicated that his plans are to remove the equipment from RCRA Unit 48 and size reduce the material as required for consolidation under the engineered cover. The RCRA Unit 21 (building shell) would be removed and decontaminated for storage. The RCRA Unit 48 rubble/debris would be staged under a protective cover on the concrete pad until the SEPs were prepared for rubble/debris consolidation then the final RCRA Unit 21 could be closed. Harlen Ainscough will look into the regulatory acceptability of this strategy. Harlen will investigate whether RCRA Unit 21 can remain once the physical changes of building shell removal are complete.

Andy Ledford asked if sitewide investigative derived material (IDM) could be consolidated within the OU4 CAMU. Harlen Ainscough responded that it would be possible. However, he specified that the addition of different contaminants could change the cumulative risk from the CAMU. Therefore, DOE would be required to demonstrate that the inclusion of the IDM would be protective of human health and the environment. At a minimum, the demonstration would include running the VLEACH model for unsaturated conditions (if IDM was consolidated above the subsurface drain) in addition to assessing the leaching potential under saturated conditions (if IDM was consolidated within the artificial vadose zone).

Andy Ledford asked if the CAMU concept would allow the desiccated sludge to be consolidated beneath the engineered cover above the subsurface drainage layer. Harlen responded that it might be possible, but recommended that DOE honor their previous commitment to close the SEPs without the sludge for the following reasons:

- 1) The sludge would require treatment.
- 2) Public perception would likely jeopardize the approval of the IM/IRA.
- 3) DOE would have to demonstrate that the consolidation of sludge would be protective of human health and the environment for a 1000-year period.
- 4) Schedule concerns could the sludge be treated and tested in time to demonstrate effective consolidation within the IM/IRA.

Philip Nixon, Project Manager